PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 28 SEP 2004
WIPO PCT

Applicant's or agent's file reference	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
040014wo/Me/bs		

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US 03/11255	10.04.2003	18.06.2002

International Patent Classification (IPC) or both national classification and IPC
B41M5/00

Applicant
3M INNOVATIVE PROPERTIES COMPANY et al.

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

 ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of 7 sheets.

EPO - DG 1
01. 11. 2004

3. This report contains indications relating to the following items:

(107)

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
16.01.2004	24.09.2004

Name and mailing address of the international preliminary examining authority:	Authorized Officer
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US 03/11255

I. Basis of the report

1. With regard to the **elements** of the international application *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*:

Description, Pages

1-3, 5, 8-28, 30-44, 46, 47	as originally filed
4, 6, 7, 29, 45	received on 05.06.2004 with letter of 04.06.2004

Claims, Numbers

11-37, 38 (part), 47-56	as originally filed
1-10, 38 (part), 39-46	received on 05.06.2004 with letter of 04.06.2004

Drawings, Sheets

1/2-2/2	as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

 These elements were available or furnished to this Authority in the following language: , which is:

 ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).

 ☐ the language of publication of the international application (under Rule 48.3(b)).

 ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

 ☐ contained in the international application in written form.

 ☐ filed together with the international application in computer readable form.

 ☐ furnished subsequently to this Authority in written form.

 ☐ furnished subsequently to this Authority in computer readable form.

 ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

 ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

 ☐ the description, pages:

 ☐ the claims, Nos.:

 ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

 (Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

 see separate sheet

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	2, 4-6, 8, 9, 11, 12, 14, 19, 23, 27, 30, 33, 38-51, 54, 56
	No:	Claims	1, 3, 7, 10, 13, 15-18, 20-22, 24-26, 28, 29, 31, 32, 34-37, 52, 53, 55
Inventive step (IS)	Yes:	Claims	11, 12, 14, 19, 23, 30, 33, 51, 54, 56
	No:	Claims	1-10, 13, 15-18, 20-22, 24-29, 31, 32, 34-50, 52, 53, 55
Industrial applicability (IA)	Yes:	Claims	1-56
	No:	Claims	

2. Citations and explanations

 see separate sheet

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Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1: EP-A-1209519 (Eastman Kodak Company)
D2: EP-A-1209518 (Eastman Kodak Company)
D3: US-A-2001000236 (ExxonMobil Chemical Company)
D4: WO0200412 (3M Innovative Properties Company)

1. Novelty (Art. 33(2) PCT) and Inventive Step (Art. 33(3) PCT)

1a. From documents D1, D2, and D3 a printable substrate is known. Said substrate comprises oriented polypropylene foam layer having an ink receptive surface (D1: page 4, lines 47-48; page 6, lines 9-15; page 7, lines 51-52; D2: page 4, lines 47-48; page 6, lines 9-15; page 7, lines 20-21; D3: par. [0024], [0031]-[0033]). Additionally, D3 discloses a security document comprising said substrate (D3: par. [0002]).

The feature related to high melt-strength is implicitly disclosed in D1, D2, and D3, since the same kind of polymers (e.g. crosslinked polypropylene) are used in each document the present application, D1, D2, and D3 (see page 7, lines 7-8 of the present application; and D1: page 4, line 54; page 5, line 28; D2: page 5 lines 27-28; D3: par. [0025], [0031]).

The printable substrate according to claim 1 is therefore disclosed in documents D1, D2, and D3 and the security document according to claim 36 is therefore disclosed in D3. Thus claims 1 and 36 are not novel (Article 33(1)(2) PCT).

1b. A process for making an ink receptive article is disclosed in document D3. Said process comprises the following steps:

(1) providing an oriented, high melt-strength polypropylene foam; and
(2) providing an ink-receptive surface on at least one major surface of the foam (D3: Examples 1-4).

The subject-matter according to claim 37 is therefore known from document D3, and thus not novel (Article 33(1)(2) PCT).

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1c. The features of dependent claims 2-6, 8-10, 27, 38-50 have already been employed for a process for producing a polypropylene foam structure, see document D4 (page 4, line 5 - page 19, line 8). It would therefore be obvious to the person skilled in the art, to apply these features with corresponding effect to a polypropylene foam according to documents D1, D2, or D3, thereby arriving at the substrate according to claims 2-6, 8-10, 27, and the process according to claims 38-50 (Article 33(3) PCT).

1d. Dependent claims 2-10, 13, 15-18, 20-22, 24-29, 31, 32, 34, 35, 38-50, 52, 53, and 55 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step.

2. **Further remark related to item I. Basis of the report**

It is noted that when the amended sheet for page 7 was filed, it seems that the last line (line 32) on the originally filed page 7 has been omitted by mistake.

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